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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/660,054	09/11/2003	Shigeru Yamane	MAT-8260US1	7291
23122	7590	05/18/2006	EXAMINER	
RATNERPRESTIA			DIXON, MERRICK L	
P O BOX 980			ART UNIT	
VALLEY FORGE, PA 19482-0980			PAPER NUMBER	
			1774	

DATE MAILED: 05/18/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/660,054	Applicant(s) YAMANE ET AL.	
	Examiner Merrick Dixon	Art Unit 1774	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on preappeal 1-23-06.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 37,40,41,44,47,59,66,69,70,73 and 76 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 37,40,41,44,47,59,66,69,70,73 and 76 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.


MERRICK DIXON
PRIMARY EXAMINER

- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

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1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 37,47,59 and 66 are rejected under 35 U.S.C. 102(b) as being anticipated by Haas et al(US 6224965). The cited reference to Haas et al(6224965) teaches the claimed invention comprising circuit board, with release layers thereon and holes therein- col 1, lines 31-40;col 3, lines 24-39; col 3, lines 54-67;col 4, lines 29-43;col 4, line 62- col 5, line 22; col 5, lines 56-60;col 6, lines 31-46; col 7, lines 52-65;col 10, lines 21-46.

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 40,41,44,69,70,73 and 76 are rejected under 35 U.S.C. 103(a) as being unpatentable over Haas et al(US 6224965) in view of Nakatani et al(US 6096411). The primary reference to Haas et al teaches the claimed invention, as discussed above, inter alia. Although the reference manipulates its density throughout the reference,(see reference), the secondary reference more clearly shows this aspect-col 6, lines 11-19. It would have been obvious to one of ordinary skill in the art at the time the invention is made to manipulate such disclosed densities of the references, in the absence of

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unexpected results motivated by the desire to impart desired properties to the product.

Particularly as it is recognized that obtain an optimum value of a result effective variable involves only routine skill in the art- In re Boesch 617, F.2d 272, 205 USPQ 215(CCPA 1980).

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Haas et al(US 6530147) and Stewart et al(US 6906425) are cited of interest for their respective teachings as set forth and additionally to show the state of the art.

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Applicants who wish to send a facsimile (draft copies) for the examiner's immediate review can do so by using the Examiner's personal fax number at 571-273-1520. The faxing of all papers must conform with the notice published in the Official Gazette, 1096 O.G. 30 (November 15, 1989). **NOTE: All facsimiles sent to the examiner's**

personal fax number should be in draft-forms and will be treated as informal.

Same facsimiles will not be entered in the related applications unless otherwise agreed and noted by the examiner.

The fax number for all other fascimile is 571-273-8300.

Information about **the status of an application** may be obtained from the Patent Information Retrieval system (**Private PAIR**).

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Status inquiries for **published applications** may be retrieved from either **Private PAIR** or **Public PAIR**. Questions about the PAIR system should be directed to the Electronic Business Center at **866-217-9197**.

Any questions concerning the instant communication should be directed to Examiner Dixon, at 571-272-1520, Mondays, Wednesdays and Thursdays, between 12 noon and 8 PM, eastern time .

A handwritten signature in black ink, appearing to read 'Merrick Dixon', with a stylized, cursive script.

Merrick Dixon

Primary Examiner

Group 1700